



FSOP-4 Procedure for Secchi Disk Measurements

Adapted from: EPA Volunteer Stream Monitoring: A Methods Manual www.epa.gov/volunteer/stream/155.html

A Secchi disk is a black and white disk that is lowered by hand into the water to the depth at which it vanishes from sight (Figure 5.10). The distance to vanishing is then recorded. The clearer the water, the greater the distance. For river monitoring they have limited use, however, because in most cases the river bottom will be visible and the disk will not reach a vanishing point. Deeper, slower moving rivers are the most appropriate places for Secchi disk measurement although the current might require that the disk be extra-weighted so it does not sway and make measurement difficult.

The line attached to the Secchi disk must be marked according to the nearest 1/10 meter. Meter intervals can be tagged (e.g., with duct tape) for ease of use.

To measure water clarity with a Secchi disk:

- Check to make sure that the Secchi disk is securely attached to the measured line.
- Lean over the side of the boat and lower the Secchi disk into the water, keeping your back toward the sun to block glare.
- Lower the disk until it disappears from view. Lower it one third of a meter and then slowly raise the disk until it just reappears. Move the disk up and down until the exact vanishing point is found.
- Note the point where the line enters the water. Record the measurement on your data sheet. Repeating the measurement will provide you with a quality control check.